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AUGUST 1986

ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

Petroleum imports in August reached their highest level since 1980, aided by higher demand and lower domestic supplies.

Increased demand for most major products led to a 3.5 percent (563 thousand B/D) increase in total petroleum products supplied. Excluding distillates, which have been alternately rising and falling in year-to-year comparisons for recent months because of nonprimary inventory movements, the remaining products experienced a 4.3 percent increase for August. Gasoline deliveries' rise was consistent with recent trends; though the increase for residual fuel oil was smaller than for July as filling of user storage declined, it still represented a substantial gain.

Production in the lower 48 continued to decline in response to this year's substantiaily lower oil prices. Though down about 164 thousand B/D year to year in August, since the beginning of the year production outside Alaska has dropped at an annual rate of half a million barrels per day, contrasting sharply with previous trends. The combination of a distillate production increase of over 300 thousand B/D and the deliveries decline helped to raise distillate inventories about 16 million barrels over the month, an above-average increase.

PRODUCT SUPPLIED[1/]

Gasoline

LARGEST SUMMER GAIN SINCE 1978. August's gasoline deliveries rose 3.2 percent (231 thousand B/D) and brought the June-through-August increase to about 4 percent over last year's peak driving season. This increase, the largest for similar months since 1978, tends to confirm that summer driving patterns have responded to this year's substantially lower prices. As noted last month, peak-period driving historically has been more responsive to prices than has driving at other times of the year.

Retail prices rose slightly for the month, but, on an inflation-adjusted basis, were still about 28 percent lower than last August and only half of the early-1981 peak.

Distillates

SMALL NET GROWTH IN RECENT MONTHS. The 0.7 percent decline for distillates in August continues the alternating deliveries pattern of the prior three months—up about 6 percent in May, down over 4 percent in June, and up about 2 percent in July—averaging out to less than a one percent increase for the four-month period once some of the apparent swings in nonprimary inventories are netted out. Though consumption increases have occured in some sectors—primarily on-highway diesel—other sectors indicate little change. Data from the Department of Transportation indicate a 3 percent rise in diesel sales (including for off-highway use) for the first five months of this year. However, until recently, rail traffic has been relatively flat, domestic agricultural conditions indicate a decline in distillate requirements, and industrial activity has shown little year-to-year change. With little of residential/commercial deliveries representing actual consumption at this time of year, the modest growth of total distillate deliveries over the past several months mainly reflects increased diesel use.

Residual Fuel Oil

UTILITIES CONTINUE INCREASED PURCHASES. Residual fuel oil deliveries continued to rise in August, though the 275 thousand B/D, 23.5 percent increase was a third less than July's increase. Since little year-to-year change due to either bunker fuel deliveries or industrial fuel switching has been observed in recent months, it is likely that the increase largely represents greater purchases by electric utilities. The lesser rate of increase for August than for the prior two months may indicate that the filling of nonprimary inventories noted last month, which boosted deliveries for June and July, tapered off somewhat for August.

Indeed, recently-compiled data for June confirm the role utility inventory changes played in residual fuel oil deliveries in that month. Utilities increased their residual fuel oil stocks in June at a rate of over 60 thousand B/D. Combined with the previous June's decline in utility inventories, roughly 90 thousand B/D of June's 300 thousand B/D increase in total residual fuel oil deliveries can be attributed to shifts in electric utility inventories. With the probable increase in utility consumption for August ranging from 200 to 250 thousand B/D, the role of user inventory changes was apparently diminished from that of the prior two months.

Kerosine Jet Fuel

UP 12 PERCENT FOR AUGUST. After an unusual drop in July, August's deliveries returned to the range of increases more typical of those experienced earlier in the year, rising 12.2 percent or 122 thousand B/D. Available seat miles were up 10 percent in July, indicating that that month's deliveries decline was not related to air traffic developments.

Other Oils

MIXED RESULTS FOR INDIVIDUAL PRODUCTS. Deliveries of other oils have been relatively flat in recent months, with little year-to-year change in either direction. August's 1.3 percent, 53 thousand B/D increase continued that pattern. The experience for individual products, however, has varied greatly. Ethane deliveries, for example, have declined in the face of economics favoring heavier naptha- and gasoil-based feedstocks. Propane deliveries have continued to decline year-to-year while butanes and asphalt have shown gains.

(In millions of B/D)	AUGUST ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1986	1985	% Change	1986	1985	% Change
—Total domestic products supplied	16.6	16.1	3.5	16.1	15.7	2.5
—Motor gasoline supplied	7.5	7.2	3.2	7.0	6.9	2.2
—Distillate fuel oil supplied	2.6	2.6	(0.7)	2.9	2.9	0.8
—Residual fuel oil supplied	1.4	1.2	23.5	1.4	1.2	16.7

SUPPLY[1/]

Total supply rose 1,369 thousand B/D in August, the 878 thousand B/D decline in domestic supply partially offsetting total imports' 2,247 thousand B/D surge.

Production

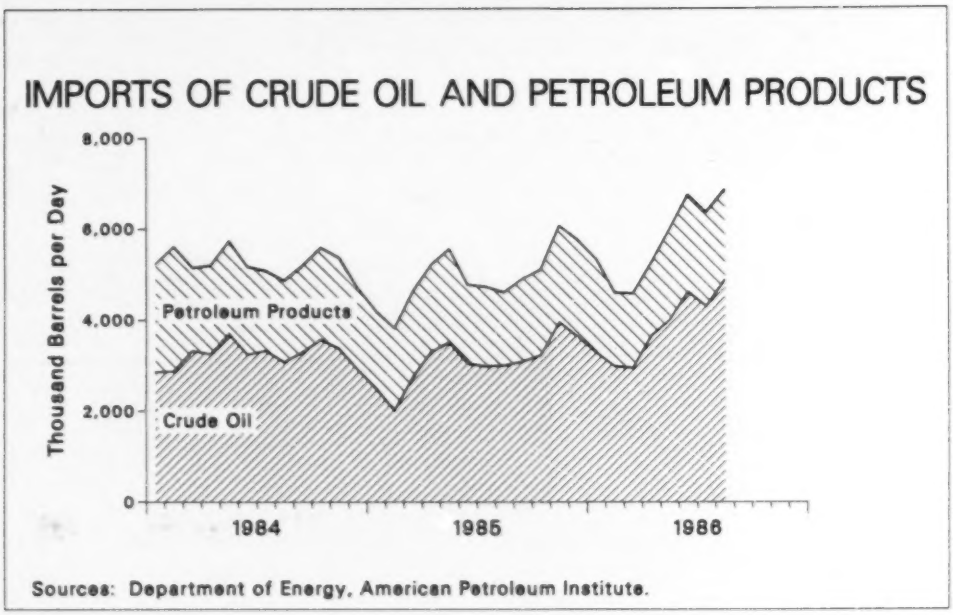
LOWER 48 DECLINE CONTINUES. Domestic crude oil production declined 1.7 percent or 150 thousand B/D in August, with most of the year-to-year decline attributable to slipping production in the lower 48. Year-to-year comparisons, however, partially obscure the impact the substantial crude oil price decline has had on lower 48 production trends since the beginning of the year. For the first eight months of 1986, estimated production outside Alaska has dropped an average of over 40 thousand B/D per month—equivalent to an annual rate of half a million barrels per day or 7 percent. This contrasts sharply with previous trends. Lower 48 production in 1985 was essentially the same as in 1984 and 2.5 percent higher than in 1983. Lower prices have greatly reduced the drilling of new wells and the maintanence and servicing of existing ones, with consequent results on crude oil production.

Imports

HIGHEST LEVEL SINCE 1980. Petroleum imports in August, at over 6.8 million B/D, were the highest since early 1980 as crude oil imports rose above their recent-year record set in June. Product imports also rose nearly 380 thousand B/D, and combined with crude oil's rise of nearly 1.9 million B/D, brought the total increase to over 2.2 million B/D. The increased availability of OPEC crude oil so far this year, combined with rising demand and domestic production that has been drifting downwards, all contributed to August's high import level.

As the graph shows, total imports have been rising almost uninterruptedly since early this year. About 40 percent of the roughly 1 million B/D, year-to-date increase is due to increased consumption and reduced domestic supplies; another 30 percent or so reflects a return to import levels that would be needed to sustain inventories at a seasonally-adjusted, constant level after a more-than-seasonal drawdown in the first eight months of 1985. Most of the remainder reflects additions to inventories this year above typical patterns.

Continued growth in residual fuel oil demand contributed to the 222 thousand B/D increase in imports of that product. Though distillate imports rose 174 thousand B/D year-to-year, about two thirds of the increase is attributable to unusually low imports last August. Imports of motor gasoline and components declined 44 thousand B/D.



Refinery Operations

DISTILLATE PRODUCTION AHEAD MORE THAN 300 MBD.

Refinery utilization continued in the mid-80s in August, a range it has remained within since May as refiners responded to increases in demand. Production of motor gasoline rose from July to nearly 7.1 million B/D, coming close to the recent-year highs of May and June. Distillate production exceeded 2.9 million B/D, rising 13 percent (337 thousand B/D) from last August and reaching the highest August level since 1979.

August's 85.6 percent utilization rate is calculated based on total operable capacity of about 15.6 million B/D, of which approximately 480 thousand B/D had been idle for more than a year as of June 1. This idle capacity was distributed by district as follows: 10 percent in PAD I, 21 percent in PAD II, 31 percent in PAD III, 3 percent is PAD IV, and 35 percent in PAD V.

Inventories

CRUDE OIL FALLS, DISTILLATE RISES.

Total inventories rose only slightly during August, a change not out of line with recent years' experience. An 11 million barrel increase in product stocks was largely offset by a 10 million barrel decline for crude oil despite the high level of crude oil imports. Distillate inventories rose 16 million barrels, about 10 million barrels more than the average August change of the prior three years. By the end of the month, the decline in deliveries, combined with high refinery production, brought distillate inventories to a level 19 million barrels higher than for August 1985.

(In millions of B/D)	AUGUST ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1986	1985	% Change	1986	1985	% Change
—Total supply	17.3	16.0	8.6	17.0	16.0	6.3
—Crude production[2/]	8.7	8.8	(1.7)	8.9	9.0	(1.1)
—Crude oil imports[3/]	4.9	3.0	62.3	3.8	2.9	32.7
—Product imports	2.0	1.6	23.6	1.9	1.8	4.5

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 505 million barrels as of August 31, 1986).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	AUGUST			YEAR-TO-DATE		
	1986[1]	1985[2]	% Change	1986[3R]	1985[2]	% Change
Products Supplied:						
Total motor gasoline	7,473	7,242	3.2	7,013	6,860	2.2
Finished leaded motor gasoline*	2,289	2,487	(8.0)	2,229	2,487	(10.4)
Finished unleaded motor gasoline*	5,184	4,755	9.0	4,784	4,373	9.4
Naphtha-jet	171	211	(19.0)	209	217	(3.7)
Kerosine-jet	1,120	998	12.2	1,059	974	8.7
Distillate fuel oil	2,618	2,636	(0.7)	2,890	2,866	0.8
Residual fuel oil	1,443	1,168	23.5	1,397	1,197	16.7
All other oils[4]	4,103	4,050	1.3	3,824	3,805	0.5
Reclassified[5]	- 305	- 245	24.5	- 303	- 228	32.9
Total domestic products supplied	16,623	16,060	3.5	16,089	15,691	2.5
Exports	670	749	(10.5)	753	740	1.8
Total products supplied	17,293	16,809	2.9	16,842	16,431	2.5
Supply:						
Domestic production:						
Crude oil[6]	8,653	8,803	(1.7)	8,879	8,975	(1.1)
Natural gas liquids	1,554	1,594	(2.5)	1,609	1,598	0.7
Other supply[7]	280	968	(71.1)	819	755	8.5
Total domestic supply	10,487	11,365	(7.7)	11,307	11,328	(0.2)
Imports:						
Crude oil, total	4,868[10/]	2,999[10/]	62.3	3,834[10/]	2,890[10/]	32.7
Canadian	567	408	39.0	547	454	20.5
Other	4,301	2,591	66.0	3,287	2,436	34.9
Products, total	1,981	1,603	23.6	1,887	1,805	4.5
Residual fuel oil	646	424	52.4	636	457	39.2
Other	1,335	1,179	13.2	1,251	1,348	(7.2)
Total imports	6,849	4,602	48.8	5,721	4,695	21.9
Total supply	17,336	15,967	8.6	17,028	16,023	6.3
Stock change, all oils	+ 43	- 842	XXXX	+ 186	- 408	XXXX
Refinery Operations						
Input to crude oil distillation units	13,359	12,222	9.3	12,761	12,017	6.2
Operable capacity	15,602	15,734	(0.8)	15,530	15,647	(0.7)
Refinery utilization (%)[8]	85.6%	77.7%	10.2	82.2%	76.8%	7.0
Crude oil runs	13,254	12,045	10.0	12,653	11,862	6.7

Stocks (millions bbls.)	1986		1985[2]	% Change from ...	
	Aug. 31[9]	July 31[9]	Aug. 31	Previous Month	Year Ago
Crude oil [10/]	331.4	341.1r/	318.5	(2.8)	4.1
Unfinished oils	100.9	108.2	103.4	(6.7)	(2.4)
Total motor gasoline**	218.9	222.6r/	221.6	(1.7)	(1.2)
Finished leaded motor gasoline*	69.4	71.8	79.1	(3.3)	(12.3)
Finished unleaded motor gasoline*	114.4	116.4r/	109.0	(1.7)	5.0
Naphtha-jet	6.1	5.5	7.0	10.9	(12.9)
Kerosine-jet	42.6	43.1	34.7	(1.2)	22.8
Distillate fuel oil	132.5	116.6r/	113.8	13.6	16.4
Residual fuel oil	40.8	39.7	37.2	2.8	9.7
All other oils	197.6	192.6r/	170.5	2.6	15.9
Total all oils	1,070.8	1,069.4r/	1,006.7	0.1	6.4

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-June, U.S. Department of Energy, July-August, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes unaccounted-for crude oil, refinery input of other hydrocarbons, and processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.